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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/774,980

02/09/2004

Luc Vanmaele

27500-GN03027

9601

7590 02/26/2007
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EXAMINER

LEE, SIN J

ART UNIT

PAPER NUMBER

1752

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
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3 MONTHS

02/26/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/774,980

Applicant(s)

VANMAELE ET AL.

Examiner

Sin J. Lee

Art Unit

1752

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 January 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,5,6,10-16,18-24,26-53,55 and 59 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 13,14,26-45,47-53 and 55 is/are allowed.
- 6) ☒ Claim(s) 5,6,15,16,18,21-24 and 59 is/are rejected.
- 7) ☒ Claim(s) 1,10-12,19 and 20 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☒ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application
- ☐ Other: _____

DETAILED ACTION

1. Claims 2-4, 7-9, 17, 25, 46, 54 and 56-58 are canceled claims.
2. In view of amendment of January 31, 2007, previous 103(a) rejection over Figov'001 in view of Nguyen'561, previous 103(a) rejection over Mantell et al'346 in view of Nguyen'561, previous 103(a) rejection over Figov'001 or Mantell et al'346 in view of Nguyen'561 and further in view of Kamata'987 and previous 103(a) rejection over Figov'001 or Mantell'346 in view of Nguyen'561 and further in view of Nguyen'024 are hereby withdrawn.
3. Due to new ground of rejection, finality of the last office action is hereby withdrawn, and the following rejection is made *non-final* with the Examiner's sincere apology.

Claim Rejections - 35 USC § 102

4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
5. Claims 59, 5, 6, 15, 16, 18, and 21-24 are rejected under 35 U.S.C. 102(e) as being anticipated by Nguyen et al (US 6,664,024 B1).

In claim 1 (see also table in col.6), Nguyen teaches a photocurable resin composition containing at least one photoinitiator (such as mixture of triaryl sulfonium hexafluoroantimonate salts and 1-hydroxy-cyclohexyl phenyl ketone), at least one photoactivated color changing compound and at least one functionalized reactive polysilsesquioxane compound. In claim 20, Nguyen teaches

3-(3,6,7,9,11,13,15-heptacyclopentylpentacyclo[9.5.1.
1^{3,9}.1^{5,15}.1^{7,13}]octasiloxan-1-yl)propyl methacrylate

Art Unit: 1752

(which is one of the compounds of present claim 59) as one of *only nine* examples for the polysilsesquioxane compound. Based on Nguyen's teaching, one skilled in the art would immediately envisage using that compound as Nguyen's polysilsesquioxane compound. Nguyen also teaches (see claim 1 and Example 1) the use of another photopolymerizable substance selected from monomers (such as trimethylolpropane triacrylate), oligomers, *dendrimers* and polymer. Thus, Nguyen teaches present inventions of claims 59, 5, 6, 15, 16, 18 and 21-24 (since Nguyen teaches all of the components of present claim 59, it is the Examiner's position that Nguyen's composition would inherently be capable of being used as a radiation curable ink composition).

Allowable Subject Matter

6. Claims 1, 10-12, 19 and 20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Nguyen does not teach or suggest present amount of the colorant claimed in present claim 1 nor the present conducting or semiconducting polymer of claim 19.

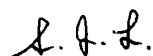
7. Claims 13, 14, 42, 26-41, 43-45, 47-53 and 55 are allowed. Nguyen does not teach or suggest present vinyl ether (meth)acrylates of claims 13, 42 and 55.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sin J. Lee whose telephone number is 571-272-1333. The examiner can normally be reached on Monday-Friday from 9:00 am EST to 5:30 pm EST.

Art Unit: 1752

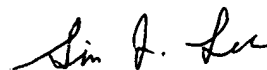
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia Kelly, can be reached on 571-272-1526. The fax phone number for the organization where this application or proceeding is assigned is **571-273-8300**.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



S. Lee

February 22, 2007



SIN LEE
PRIMARY EXAMINER